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Managing your digital footprint: possible implications for teaching and learning

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Abstract: This paper introduces current research taking place at the University of Edinburgh, which examines students' use of social media and how they manage their digital footprint. The work engages all student cohorts (undergraduate, postgraduate and PhD, and including online students) and aligns with the innovative cross-University 'Digital Footprint' campaign (2014-2015) in order to conduct a systematic programme of research aimed at building our institutional and sectoral understanding of how students are managing their digital footprints, where such management is lacking, and what this might mean for future institutional planning to build student competence in this area.

This paper will outline the rationale for this work, including theoretical and practical contexts and challenges associated with running a digital footprint (social media awareness) campaign on this scale, as well as providing some initial insights arising from activities to date. It will also look ahead to ongoing and future activities, including further research work and a planned impact analysis of the social media awareness campaign.

The "Managing your digital footprint" campaign is a collaboration between the University of Edinburgh Institute for Academic Development (IAD), EDINA, Student Information Portals, Information Services, Careers Service, and the Edinburgh University Student Association. The research is funded under the University of Edinburgh Principal's Teaching Award Scheme and is being led by researchers from the IAD, the Moray House School of Education and EDINA.

It is anticipated that research findings for this project will feed into University of Edinburgh policy, provide evidence-based guidance to colleagues with responsibility for embedding digital social media in learning and teaching, provide evidence to enable support services to meet students' needs and use of social media, and give a rich picture of the current 'state of play' among our diverse student body which will be useful equally for students and staff of the University.

Keywords (Max 5 words): Digital Footprint, social media, students, managing digital footprint, social media risks.

1. Introduction

Social media is increasingly ubiquitously embedded in higher education students' personal, working and learning lives. These spaces introduce new opportunities, but also new risks and complexities including cultural, political, social and psychological aspects (e.g. Delahunty, Verenikina and Jones, 2013; Ross, 2011). As universities progressively incorporate social media into teaching and learning practices, there is a growing need to better understand students' own experiences, understanding and perceptions of social media, and the norms and challenges developing in these spaces.

"Digital footprints", those traces left behind online, are of particular importance in the higher education context, since students face a series of transitions and liminal states as they progress their university experience. Universities also have a duty of care for students, particularly younger undergraduates, where there is particular need for pastoral care and support.

As a student (or staff member, or any other individual) engaged with social media spaces, they generate complex trails of these digital footprints that may include their various presentations of self (social profiles, comments, etc.), traces of their activity (web analytics, cookies, sharing data, etc.), interests, opinions, interactions, and anything else they choose to share online.

However, the extent to which students are aware that they are creating these tracks and traces, and have some ability to manipulate and control them, is unclear at present. Whilst there is widespread anecdotal belief

that all young people are inherently “tech savvy”, something best encapsulated through the influential “Digital Natives” concept (Prensky, 2001), now widely critiqued (including by its author). Current research suggests that young people may be more exposed to new technologies but are not necessarily approaching them from a uniformly well-informed, critical or enthusiastic position (Jones et al, 2010).

Social norms may vary by age, demographics, and stage of life making it difficult to reach clear conclusions about behaviours without a more nuanced understanding over the motivations and manner in which privacy may be expressed (boyd 2014). Nonetheless it is clear that students do need to understand how to ‘work’ social media for their own professional and competitive advantage (e.g. THES 2014) and how to manage their own digital footprints, since they have the potential to deeply damage their employment opportunities and future personal wellbeing.

These new opportunities, risks, and complexities faced by students have substantial and complex implications for academic and support services, and it is with this in mind that a team at the University of Edinburgh is undertaking an innovative awareness-raising campaign and research project, both branded as “Managing your digital footprint”.

1.1 Social media at the University of Edinburgh

The University of Edinburgh, like other higher education institutions, has witnessed a steady increase in the use of social media for official purposes, initially for communications and marketing, but now spanning many areas of business, including student recruitment and adoption in teaching and learning contexts. As staff and students find social media embedded into their day to day life it is not surprising that academic activities have gradually followed suit. With that said, the research team also wants to identify if the assumptions often made about students’ use for social media is accurate, as this could have implications for mainstreaming social media in communications or learning and teaching strategies.

In addition to formal usage of social media at the University, students also frequently take the initiative to create their own informal online study groups which are encouraged and, to some extent, supported through best practice guidance (usually targeted at research students and staff), via course introductions and handbooks (for some UG and taught PG courses), and through those services focused on pastoral and academic conduct responsibilities.

Support specifically focusing on how students use social media, particularly for curating digital footprints for personal or professional reasons has, however, been quite dispersed and varied across the institution to date. Where pockets of support have emerged they are primarily in subjects with strong vocational connections, such as medicine and veterinary medicine, where students are often treated as a paraprofessional or professional-in-the-making from their entry into university. These courses also tend to be typified by close relationships to associated professional bodies, lending a very clear shared sense of professional behaviours and required social media guidance and support (Chester 2013).

Medical students, for instance, are provided with a clear articulation of the appropriate (and inappropriate) conduct of professional doctors through the General Medical Council’s (2012) advice and social media guidance. This unambiguous, if restrictive, position on social media gives students unambiguous boundaries for acceptable online activity, and thus also provides clear signals to academic and university support units on how social media should be supported and guided. It is perhaps unsurprising that the support practices around these subjects seem to be better developed, visible and consistent. At the same time it should also be noted that these are high stakes courses with demanding workloads and competitive application processes, which also encourages students to take a more thoughtful and proactive approach to crafting and managing their public tracks and traces.

Elsewhere in the University there is greater variance in the type and level of support provided. The partners in the *Managing your digital footprint* project are well placed to understand this diversity of current offerings, since they include areas of the University that regularly assist students (from all subject areas) with guidance and training around technical, social, personal and professional opportunities and challenges associated with social media on a daily basis.

1.2 Crafting a cross-organisation approach

In order to understand the breadth of student social media use and needs, and opportunities for improving the relevance and consistency of teaching and support approaches, the *Managing your digital footprint* project is taking an innovative cross-university approach. The project's awareness raising campaign, which spans the 2014-15 academic year, brings together activities and support across academic departments, support units, and the student association (EUSA), in recognition of the fact that social media ubiquitously cuts across all areas of student (and staff) lives.

Indeed, the realities of aiming to reach a meaningful proportion of the University of Edinburgh's approximately 32,000 students require such an innovative and collaborative approach. Whilst not every student will be reached by the campaign, the project is reaching out across the student body with both campaign and research strands. The project will thus provide recommendations that apply to a larger scale and range of students than is typically considered in current literature on social media in higher education contexts, which often focuses on single courses, or the comparing of clearly defined cohorts.

A major challenge in undertaking a project on this scale is the establishment of common understanding and support for the work being undertaken, something requiring substantial pre-project discussion and consensus building. In this the project greatly benefits from the experience of the research team as active practitioners and trainers within the university, but also from the existence and interest of an active community of staff, working at all levels of the institution, who have a clear interest and professional responsibility for social media in their department/team/college.

1.3 Combining campaign and research activities

The *Managing your digital footprint* project comprises of two separate but interwoven strands: an awareness raising campaign; and a research project (see Fig. 1). The reason this combined approach has been taken is to enable the project team to build buzz and engagement through the campaign, enabling the identification of volunteers for the research work. Both aspects of the project also benefit from broad publicity for the project itself (posters, promotional items, news items, competitions).

The campaign itself provides practical opportunities to trial different approaches to training, support and best practice, and an opportunity to adapt and respond to feedback to the project activities.

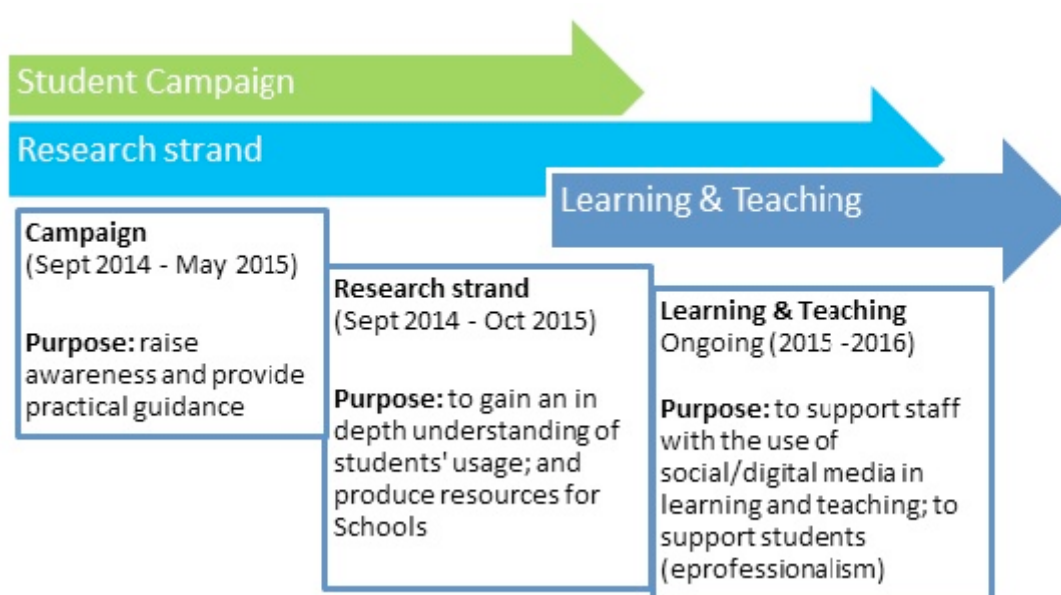


Figure 1: Vision of the Digital Footprint project & research strands

2. The Managing your digital footprint project

In both the campaign and parallel research strand, there is common understanding of what constitutes “digital footprints”, something articulated to student audiences as:

It's the data you leave behind when you go online. It's what you've said, what others have said about you, where you've been, images you're tagged in, personal information, social media profiles and much more. Find out how to manage your digital footprint.

(University of Edinburgh, 2014)

2.1 The Awareness-raising campaign

The *Managing your digital footprint* campaign focuses on provoking awareness, discussion and engagement around issues associated with social media use and online tracks and traces. The campaign is targeted at students and PhD researchers at all levels, including ODL (Online Distance Learning) students who do not attend campus locations.

The campaign has been promoted via a website (IAD 2014) and a number of social media platforms. The promotions strategy includes a logo (Fig. 2), online platforms, print materials, pens, competitions, workshops as well as a staff briefing paper. Many of the promotional activities have also been undertaken by the campaign collaborators, ensuring a wider outreach and possible impact. For example workshops have been jointly delivered by the Careers Service (focusing on the use of LinkedIn) and the Institute for Academic Development (focusing on managing a digital footprint).



Figure 2: Digital Footprint campaign logo (2014-15)

One of the key aspects of the campaign was the issuing of a survey to an appropriate cross section of the student population at the University. The survey was issued to ~11,000 students via email, and received 587 responses. Questions focused on behaviour, such as the creation and abandonment (but not deleting) of online profiles; managing privacy settings, tagging themselves or others; sharing photos; and remaining anonymous online. By understanding these types of issues in relation to factors such as age and degree programme, this could help to determine how the University could support students in their use of social media both socially and in an educational context. The analysis of the survey is currently being undertaken by the research team, though some early findings are discussed in this paper.

2.2 The Managing your digital footprint research strand

Through a Principals Teaching Award Scheme grant, the one year research strand of the *Managing your digital footprint* project brings together researchers from the University of Edinburgh School of Education, the Institute for Academic Development, EDINA and EUSA, the University's student association.

The initial phase of research draws from the awareness raising campaign survey, consisting of 25 questions issued a few weeks after the launch of the digital footprint campaign in October 2014 to approximately 11,000 students from a representative cross section (in terms of age, gender and degree path - UG, PGT, ODL and PhD) of the student cohort. The responses have not only provided core research data, but also baseline data against which to monitor the performance of the campaign when a second survey is run in June 2015.

The team will be running focus groups, canvassing student attitudes and experiences from small groups of volunteers identified through the survey and other campaign activities. A small number of intensive virtual ethnographies (Hine, 2000) will also be conducted. This is an approach that will see volunteer participants providing researchers with access to their online social networks and digital presences in order to explore the realities of their day to day social media practices, and the level to which they are aware and consciously curating their online profile and footprints.

Given that this project seeks to engage with students about their personal use of social media, and the potentially sensitive personal data that are shared there, developing a sense of trust with participants, grounded in good ethical practice, has been seen as essential by the project team. Ethical approval for the campaign survey and a separate ethical approval for the research project was received early in the project, and provided assurance that any risk to the students would be minimised or eradicated.

Ethical approval and a clear process for participant consent is especially important in relation to the ethnographic tracing of student social media profiles, as we want to examine and understand how students are really engaging with social media. By implementing a virtual ethnographic approach, we hope to uncover *"an enriched sense of the meanings of the technology and the cultures which enable it and are enabled by it"* (Hine 2000: 8). While the importance of the research is to fill a gap in our knowledge of how our students use social media and are managing their digital footprint, it also provides a rich picture of the wider online cultural context. From an ethnographic approach, it is important to consider this (Giddens 1991).

A number of objectives and outputs have been set for the research team to deliver, including the analysis of the campaign survey, delivery of a digital footprint workshop which Schools could embed in programmes, as well as production of e-professionalism guidelines, which would draw from the existing guidelines of professional bodies and University guidelines.

We present some key emerging themes of this work in this paper. A full analysis of the survey is being undertaken by the Digital Footprint research team and findings will provide a valuable insight for many of the University services, including those providing support services such as the Careers Service, the students association, the Institute for Academic Development, academic departments and others considering use of social media in learning and teaching contexts.

3. Emerging themes

3.1 Online Identity and Self Presentation

"Self-presentation involves strategically disclosing and/or concealing information to portray oneself in a desirable manner"

(Wang, 2013, p.870)

A key theme of the digital footprint campaign, supported by initial research findings, is self-presentation and online identity, which can permeate a number of online and offline spaces. Drawing from Goffman, who argues that individuals have an awareness of how they present themselves (1969), and Giddens, who focuses on identity in late-modern society (1991), this concept provides a better understanding of how and why individuals present themselves in everyday life. For the purpose of this research, this can provide a basis from

which to structure our understanding of why students intentionally or unintentionally present themselves online, and consequently develop a digital footprint.

The student who identifies herself online, or where others identify someone else via text, images or video, is developing or contributing to a digital footprint. This can be exceptionally positive and can determine a strong authentic online presence for an individual. By authentic, we refer to a person who is not intentionally constructing a false identity online, rather they are portraying their 'true' self. Consequently, a student with an online identity may see a number of benefits, for example in relation to employment opportunities (for example through use of LinkedIn) or for research purposes (for example exploitation of Academia.edu), or for engaging with a community of peers (for example in a Facebook study group).

On the other hand, those who do not consider the possible extent of outreach and content with which they are posting, could experience negative effects of having an online identity, for example it may impact on their employment prospects, they may be targeted by trolls, or they experience other adverse effects (Wang 2013; Scott et al. 2014).

Those who do not take control of their own digital presence additionally run the risk of allowing others to define their identity for them through tagged images, comment, etc. posted and curated by their wider social network. This phenomenon, which Barbour and Marshall (2012) describe as the "*uncontainable self*" in their research on academics' management of their online identities, is a digital presentation of self beyond the control of the individual.

3.2 Control, privacy and identity

An area explored by Brake (2014) and identified as important in the 'Digital Footprint' research is whether or not an individual/student has deliberately chosen to remain anonymous when online. Our findings indicate that some (53%) chose to remain anonymous, on occasion. Whilst this initial result suggests that students exhibit a good level of awareness of the existence and potential implications for digital tracks and traces, it must also be remembered that our respondents are self-selecting, and may therefore be disproportionately likely to include those already holding strong feelings (positively or negatively) about digital tools.

"However large the potential audience for a given online posting might be, generally the physical experience of making it feels private"

(Brake 2014: 77).

However, even if our findings are indicative of wider student attitudes, choosing to remain anonymous or using pseudonyms in the world of social media this is becoming increasingly difficult as some sites are "*forcing users to identify themselves*" (Brake 2014: 35). This is an area that would therefore need further consideration, if some social media platforms are to be embedded within a learning and teaching environment.

Such challenges and experiences are exemplified in some MOOC (Massive Open Online Course) discussion forums, where it is possible to post anonymously. The implications for use of such spaces in a more formal educational context, especially where assessment may be a factor, are complex. Further consideration of student experience and attitudes towards anonymity, visibility and safety would need to be given to social media platforms, and indeed discussion forums on University virtual learning environments, where anonymity could be a factor.

Furthermore, the theme of privacy was also considered and a large percentage of students stated that they rarely changed their privacy settings. This response is perhaps surprising as there was also a large number of students stating that they had created a Facebook account, and this is a platform that has regularly altered the range and default stances on privacy settings. If we examine both of these factors one might question whether the students are effectively managing their digital footprint.

In addition to asking participants to indicate their own privacy practices, the survey also asked whether respondents had ever experienced a variety of online behaviours such as being tagged in photographs (whether by agreement or against their wishes); the use of an account without permission, for example as a joke; and whether they had deleted a post to avoid upsetting others. The results for these varied across the

cohorts and further analysis alongside the ethnographic study and focus groups will help us to delve deeper into these areas (and other areas) and perhaps uncover patterns in behaviour online. It is hoped that further analysis may also reveal attitudes towards such behaviours by friends, contacts, and academic or support staff, particularly where there are teaching and learning implications (e.g. over choice of tool or expectations of a mandated task) for this type of emerging etiquette.

3.3 Shifting social media sands

Social media are spaces that shift in focus and functionality (including privacy levels), but they are also spaces whose user numbers, demographics and active usage levels change over time. This is evident in the case of sites like Orkut, starting as a US (and UK/European) site but shifting to become predominantly used in India, then South America (Efrati, 2010); or in the case of Facebook, which began as a closed space for students, seeing major growth across all age ranges, and recently plateauing (with daily use declining) amongst younger site users (Facebook, 2013:15). Some of these shifts over time are documented in longitudinal studies of social media use, the Pew Internet and American Life project being the most prominent of these (e.g. Duggan et al, 2015).

The triggers for demographic changes can vary, for instance Pedro Augusto suggests that patterns of Orkut adoption and usage in Brazil was split along class lines (boyd, 2010); whilst media coverage for Facebook's decline amongst younger user picks up on the site's parallel growth amongst older users, as well as the increased use of messaging apps (e.g. Olson 2013). Whatever the reason for change it is clear that established big players in social media are not the only tools now in use by students, something confirmed by our own initial results.

Whilst previous small scale research and anecdotal evidence would suggest that University of Edinburgh students mainly use Facebook, our initial survey shows rapid growth of social mobile messaging apps, particularly Snapchat. The use of Snapchat and WhatsApp were included within the survey, in order to determine whether these platforms are being used and by which cohort (if any). Our findings align with Pew (2013) data, in that the majority of the users of these platforms were undergraduates, typically aged 17-22.

Further analysis of apps, as well as social media platforms, will provide insight into the impact that the types of devices being used (i.e. mobile devices) have on the types of sites and interactions taking place. However, we also need to be mindful not to over generalise and consider the differences between cohorts and how this might shape curriculum design, if such social media or apps are to be appropriately used within an educational context.

Such shifts and demographic factors provide significant challenges to Universities seeking to adopt social media in learning and teaching contexts. As UK HEIs increasingly seek to internationalise their student recruitment, and increase their range of on campus and online part-time postgraduate courses, the demographics of students vary far beyond a (long outdated) assumption of 17-22 year olds from the UK, studying full time and on campus. But with changing demographics how might a lecturer know which social media tools are appropriate to build into their course, or an organisation know which sites and apps to support? How can best practice and etiquette be established for social media spaces if we understand that our students are diverse in terms of age, participation, and cultural context? There is no one solution to such questions, but it is hoped that further investigation in this project will suggest best practices processes and considerations that may be used to reach appropriate decisions.

3.4 International and cultural factors

In a number of University Schools, there is anecdotal evidence to indicate that for some students the use of social media has a number of challenges, including social, academic, cultural and technological. For example, the peer led study groups which are often set up by students on Facebook, can lead to some students feeling isolated. This is because not all students have been invited to participate, or do not perceive Facebook as an academic space, or indeed they do not have and do not want a Facebook account. While these factors may be indicative of a small number of students, such experiences can have a profound impact on an individual's sense of confidence, validity, and integration into the student community.

Another example of cultural variance occurs in the Business School, whose staff actively encourages the use of the networking site, LinkedIn, as they are supporting students to develop their professional networking skills and build their online presence. However, the School recognises the challenge that this brings since not all students arrive with a LinkedIn account and many will not use it after they graduate. The reasons for this vary, such as not wanting to maintain a presence on LinkedIn, or that there is a different (preferable) professional networking platform used in other countries.

The challenges of embedding social media into the curriculum and professional practice can also occur when working with international students whose cultural background is substantially different in terms of censorship and surveillance (e.g. China); in terms of reputation and the avoidance of using real names on the internet (e.g. Japan), etc. However, such challenges also extend to domestic students, such as those working for the NHS, which imposes tight firewalls and restrictions; consequently this has had a direct impact on the course design and delivery of many of the online distance medicine courses. Such challenges for students may also apply to students using public libraries, with restrictions potentially amplifying existing challenges around maintaining contact and a sense of the university community or highlighting the limitations of access to content for some of the most disadvantaged or time-pressed students. Similarly students working on placement in schools face similar restrictions, an issue also of concern in primary and secondary school teaching and learning (Brake 2014; boyd 2014).

4. Initial reflections and future steps

The *Managing your digital footprint project* campaign and research strands, though still underway, are already enabling researchers to identify key themes and possible areas where further exploration and guidance are required.

Ultimately, the findings from the research will help the University to achieve a longer term vision is to support staff and students in their use of social media, and to effectively manage their digital footprint. Work arising from this project is likely to include a continual review of social media guidance; how social media can be effectively embedded in the curriculum (where appropriate); and how students can use social media to ensure it contributes to a positive digital footprint.

Initial feedback from staff and students has been exceptionally positive and illustrates the need for this unique cross-University campaign and associated research strand and it has highlighted the importance of this area and that further support and research will follow.

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